RECEIVED
CENTRAL FAX CENTER

OCT 20 2005

PTO/SB/97 (06-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Certificate of Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office

on October 20, 2005
Date

Sharon Tomlinson
Signature

Sharon Tomlinson, Invista North America S.a r.l. (302) 683-3299
Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

Subj: Application No. 10/780,380; Docket CL2207USNA1
Amendment to Office Action of 6/21/05 (8 pages)
Replacement Sheet (1)
Fee Transmittal for FY 2005 (1 sheet)
Petition for Extension of Time (1 sheet)

Via Facsimile No. 571 273 8300

PTO/SB/97 (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Certificate of Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office

on October 20, 2005
Date

Sharon Tomlinson
Signature

Sharon Tomlinson, Invista North America S.a r.l. (302) 683-3299
Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

Subj: Application No. 10/780,380; Docket CL2207USNA1
Amendment to Office Action of 6/21/05 (8 pages)
Replacement Sheet (1)
Fee Transmittal for FY 2005 (1 sheet)
Petition for Extension of Time (1 sheet)

Via Facsimile No. 571 273 8300

RECEIVED
CENTRAL FAX CENTER
OCT 20 2005

PTO/SB/17 (12-04)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 120.00

Complete If Known	
Application Number	10/780,30
Filing Date	February 17, 2004
First Named Inventor	Young H. Kim
Examiner Name	S.M. Rayford
Art Unit	1772
Attorney Docket No.	CL2207USNA1

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 50-3223 Deposit Account Name: Invista North America S.a r.l.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayments under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee ($)	Fee ($)	Fee($)	Fee ($)	Fee ($)	Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	300	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description	Small Entity Fee ($)	Small Entity Fee ($)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 20 or HP =	_____	x _____	= _____

HP = highest number of total claims paid for, if greater than 20

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 3 or HP =	_____	x _____	= _____

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims	
Fee ($)	Fee Paid ($)
_____	_____

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
_____ - 100 =	_____ / 50 =	_____ (round up to a whole number)	x _____	= _____

4. OTHER FEE(S)

	Fee Paid ($)
Non-English Specification, $130 fee (no small entity discount)	_____
Other: One-Month Extension of Time _____	$120.00

SUBMITTED BY

Signature	Robert B. Furr	Registration No. 32,985 (Attorney/Agent)	Telephone 302-683-3316
Name (Print/Type)	Robert B. Furr, Jr.		Date 10-20-2005

RECEIVED
CENTRAL FAX CENTER
OCT 20 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF:

YOUNG H. KIM, ET AL.

CASE NO.: CL2207USNA1 APPLICATION NO.: 10/780,380

CONFIRMATION NO.: 1816 GROUP ART UNIT: 1772

EXAMINER: S.M. RAYFORD FILED: FEBRUARY 17, 2004

FOR: ARTICLES COMPRISING AQUEOUS DISPERSIONS OF POLYURETHANES

AMENDMENT

Via Facsimile No. 571 273 8300

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed June 21, 2005, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 4 of this paper.

Conclusion begins on page 6.

Appendix (replacement sheet) is attached following page 6 of this paper.

Amendments to the Claims:

In the claims, Applicants respectfully request entry of amendments made in the claims. These amendments find support in the specification at page 5, lines 21 through 35, and in the specification taken as a whole.

Applicants thank the Examiner for the suggestion to amend the claims.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An article made from a polyureaurethane aqueous dispersion and wherein the polyureaurethane comprises a THF copolymer soft segment comprising 25 to 60 percent by weight of ethylene glycol as a comonomer and an aromatic diisocyanate.

Claim 2 (original): The article of claim 1, wherein said article is selected from the group consisting of gloves, finger cots and condoms.

Claim 3 (original): The article of claim 1, having a tensile strength of greater than 2030 psi.

Claim 4 (original): The article of claim 1, having a puncture strength of at least 200 lb/in.

Claim 5 (original): The article of claim 1, having a tear strength per thickness of material of at least 20 Newtons/mm.

Claim 6 (original): The article of claim 1, having an improved resistance to solvent attack.

Claim 7 (original): A process for producing the article of claim 1, comprising the steps:

a) dipping a mold into a coagulant solution and drying at an elevated temperature;

b) dipping the coagulant solution-coated mold into an aqueous polyureaurethane dispersion and drying;

c) subjecting the coated mold to a salt leaching bath; and

drying the coated mold at elevated temperature before stripping the article off of said mold.

REMARKS

Under the **Detailed Action**, the Examiner objected to the title of the invention as not being descriptive and suggested the following:

"ARTICLES MADE FROM POLYURETHANE DISPERSIONS".

Applicants consent to amend the Title of the invention to the Examiner's suggestion for a title descriptive of the invention.

In the specification, the Examiner objected to the informal usage of THF at page 4, line 20, as an abbreviation in the specification.

Applicants respectfully suggest that THF is a well-known informal abbreviation used by those skilled in the art for tetrahydrofuran. Furthermore, the specification as filed notes that co-owned and co-pending Application No. 10/701,317 filed November 4, 2003, hereby incorporated in its entirety, includes the definition of THF, meaning tetrahydrofuran, in paragraphs [0035] and [0036] of U.S. Publication No. 2004/0171745A1 (Application. No. 10/701,317).

Rejection under 35 USC § 112

In the claims, the Examiner objected, under 35 USC § 112, to Claims 1-7 for failing to set forth the subject matter Applicants regard as their invention.

Applicants respectfully maintain that after entry of currently amended Claim 1, now reciting an article made from a polyureaurethane aqueous dispersion and wherein the polyureaurethane comprises a THF copolymer soft segment comprising 25 to 60 percent by weight of ethylene glycol as a comonomer and an aromatic diisocyanate, that the subject matter of the invention is clearly set forth.

Rejection under 35 USC § 102(b)

In the claims, the Examiner objected, under 35 U.S.C. § 102(b), that Claims 1-7 stand rejected as being unpatentable over U.S. Patent No. 5,998,540 (Lipkin) per reason of record.

Applicants maintain that Lipkin does not disclose each and every element as set forth in the claims currently amended, expressly or inherently.

Applicants respectfully disagree with the Examiner's characterization of Lipkin as using the Applicants' identical polyureaurethane dispersions.

Applicants respectfully submit that in light of the foregoing remarks the rejection of Claims 1-7 based on Lipkin is overcome and should be withdrawn.

Rejection under 35 USC § 103

In the claims, the Examiner objected, under 35 U.S.C. § 103, that Claims 1-7 stand rejected as being unpatentable over Anderle et al. (WO02 08327A1) in view of Applicants' admission per reason of record.

Applicants maintain that Anderle et al., in view of Applicants' admission, does not make Claims 1-7 obvious under 35 U.S.C. § 103 for the reason that each and every element as set forth in the claims is neither taught nor suggested in the combination of references applied.

Claim 1 (currently amended) recites a polyureaurethane aqueous dispersion wherein the polyureaurethane comprises a THF copolymer soft segment comprising 25 to 60 percent by weight of ethylene glycol as a comonomer and an aromatic diisocyanate.

Applicants respectfully submit that the teaching of Anderle et al. relating to the substitution of polyether diols in whole or in part for the polyester diols used in the preparation of polyureaurethanes is a general teaching and not specific to the defined composition of the Applicants' THF copolymer soft segment comprising 25 to 60 percent by weight of ethylene glycol as a comonomer.

As such, Applicants respectfully submit that in light of the foregoing the rejection of Claims 1-7 is overcome and should be withdrawn.

Double Patenting

The Office Action provisionally rejected Applicants' Claim 1 over Claim 19 of copending U.S. Application No. 10/700,859 in view of Anderle et al. (WO0208327A1).

Applicants traverse. The abstract of Anderle et al. points to the presence of at least one plasticizer introduced during prepolymer formation or before prepolymer dispersal in water. Anderle et al. further points to the plasticizer as substantially or completely replacing organic diluents or solvents. As a result, the Anderle et al. plasticized compositions are less hazardous, typically have lower modulus and higher solids content and are useful in applications such as surgical gloves. The specification of Anderle et al. further discloses starting of page 17 and continuing throughout pages 18-23 to line 10 of page 23. The function of the plasticizer compounds, how the plasticizer is added during polymer formation, the effect of the plasticizer on various polymer compositions and how the plasticizer is chosen are clearly disclosed by Anderle et al. Furthermore, Anderle et al. disclose on page 18 at line 5 the use of plasticized polymer film compositions for gloves. One skilled in the art readily appreciates the details concerning the choice of plasticizer and properties of the

plasticized polyurethane compositions provided by Anderle et al. In short, one skilled in the art recognizes that plasticizers are vital components to the polyurethane compositions of Anderle et al. for use in applications such as surgical gloves.

In contrast to Anderle et al. the Applicant's claims do not require plasticizer to be added to the polyureaurethane polymers to make the articles and glove inventions therein recited. On page 7 of the Applicant's specification between lines 21 and 34 the films and gloves of the invention have a modulus of 100% elongation between 200 and 500 psi, allowing an easy stretch of the glove. Additionally, a "low set" is observed which means the gloves of the invention made from the polyureaurethane polymers disclosed therein return to their original shape after stretching. In summary the polyureaurethane polymer compositions employed by the Applicants in the manufacture of gloves require no plasticizer content in contrast to the compositions of Anderle et al. which contain a plasticizer.

The Office Action provisionally rejected Applicants' Claim 1 is over Claim 8 of copending U.S. Application No. 10/701,317 (published as US20040171745) in view of Anderle et al. WO0208327A1.

The Applicants traverse this rejection. The abstract of Anderle et al. points to the presence of at least one plasticizer introduced during prepolymer formation or before prepolymer dispersal in water. Anderle et al. further points to the plasticizer as substantially or completely replacing organic diluents or solvents. As a result, the Anderle et al. plasticized compositions are less hazardous, typically have lower modulus and higher solids content and are useful in applications such as surgical gloves. The specification of Anderle et al. further discloses starting of page 17 and continuing throughout pages 18-23 to line 10 of page 23. The function of the plasticizer compounds, how the plasticizer is added during polymer formation, the effect of the plasticizer on various polymer compositions and how the plasticizer is chosen are clearly disclosed by Anderle et al. Furthermore, Anderle et al. disclose on page 18 at line 5 the use of plasticized polymer film compositions for gloves. One skilled in the art readily appreciates these details concerning the choice of plasticizer and properties of the plasticized polyurethane compositions provided by Anderle et al. In short, one skilled in the art recognizes that plasticizers are vital components to the polyurethane compositions of Anderle et al. for use in applications such as surgical gloves.

In contrast to Anderle et al. the Applicant's claims do not require plasticizer to be added to the polyureaurethane polymers to make the articles and glove inventions therein recited. On page 7 of the Applicant's specification between lines 21 and 34 the films and gloves of the invention have a modulus of 100% elongation between 200 and 500 psi,

allowing an easy stretch of the glove. Additionally, a "low set" is observed which means the gloves of the invention made from the polyureaurethane polymers disclosed therein return to their original shape after stretching. In summary the polyureaurethane polymer compositions employed by the Applicants in the manufacture of gloves do not require plasticizer content in contrast to the compositions of Anderle et al. which contain a plasticizer.

Applicants respectfully request that the provisional double patenting rejections be withdrawn.

CONCLUSION

This response is meant to be a complete response to each and every rejection and objection set forth by the Examiner. For at least the reasons stated above, all claims are now in condition for allowance.

In the event any outstanding issues remain, the Examiner is invited to call Applicants' undersigned representative.

A one-month extension of time is attached to this Amendment. Applicants hereby authorize the Commissioner to deduct the fees necessary to comply with this Amendment from the undersigned's Deposit Account No. 503223 (Invista North America S.à r.l).

Dated: October 20, 2005

Respectfully submitted,

Robert B. Furr, Jr.
Attorney for Applicants
Reg. No. 32,985
Telephone: (302) 683-3316
Facsimile: (302) 683-3473 3474
robert.b.furr@invista.com

--REPLACEMENT SHEET--

1. An article made from a polyureaurethane aqueous dispersion and wherein the polyureaurethane comprises a THF copolymer soft segment comprising 25 to 60 percent by weight of ethylene glycol as a comonomer and an aromatic diisocyanate.

2. The article of claim 1, wherein said article is selected from the group consisting of gloves, finger cots and condoms.

3. The article of claim 1, having a tensile strength of greater than 2030 psi.

4. The article of claim 1, having a puncture strength of at least 200 lb/in.

5. The article of claim 1, having a tear strength per thickness of material of at least 20 Newtons/mm.

6. The article of claim 1, having an improved resistance to solvent attack.

7. A process for producing the article of claim 1, comprising the steps:

a) dipping a mold into a coagulant solution and drying at an elevated temperature;

b) dipping the coagulant solution-coated mold into an aqueous polyureaurethane dispersion and drying;

c) subjecting the coated mold to a salt leaching bath; and

drying the coated mold at elevated temperature before stripping the article off of said mold.